



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,024	08/24/2005	Holger Fleischhauer	35717	6974

23589 7590 11/01/2007
HOVEY WILLIAMS LLP
2405 GRAND BLVD., SUITE 400
KANSAS CITY, MO 64108

EXAMINER

NGUYEN, PHU HOANG

ART UNIT	PAPER NUMBER
----------	--------------

1791

MAIL DATE	DELIVERY MODE
-----------	---------------

11/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/520,024

Applicant(s)

FLEISCHHAUER ET AL.

Examiner

Phu H. Nguyen

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1,3-4 and 17 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Pressure time during the process for enhancing the filling capacity is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). In the specification (paragraph 29), the applicant discloses that a good expansion effect can only be achieved under these conditions if the pressure time exceeds a value of approximately 300 sec, therefore the pressure time of the process is critical to the process of the present invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ziehn (U.S Patent No. 4577646).

Regarding claim 1, Ziehn discloses a process for enhancing the filling capacity of tobacco material where in the material has an initial moisture of 10% to 30% by weight water (column 5, line 25-29), said process comprising the steps of: treating the material within a pressure vessel with a treatment gas containing at least one of the following: nitrogen gas, argon gas or a mixture thereof at pressure up to 1000 bar (overlapping the claimed "400 to 1000 bar" recites in the instant claim 1), conducting a decompression step and a heat treatment step thereafter wherein the treatment gas supply and/or the decompression step are carried out in such a way that the discharged material is supplied to a subsequent heat treatment (column 1, line 46-57). In example 1, Ziehn discloses 30 kg of finished tobacco mixture are treated in a 200 liter pressure vessel that has a filling density of 0.15kg/dm^3 which is less than 0.2kg/dm^3 . Ziehn does not expressly disclose that the pressure vessel can only be used to treat up to 30 kg. However, the increase in filling density from 0.15kg/dm^3 to about 0.2kg/dm^3 can be found through routine experimentation in effort of increasing output without changing equipments. See *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 3, Ziehn discloses the material is compressed before, during or after the pressure vessel is filled (column 6, line 18-26).

Regarding claim 4, Ziehn discloses the dependence of the fillability improvement FCI in % on the inlet temperature of the tobacco for the heat treatment (fig. 3). Therefore, it would have been obvious to one of ordinary skill

Art Unit: 1791

in the art to heat the material before or during compression to elevate the inlet temperature of the material that subsequently improves FCI.

Claims 2, 5-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ziehn (U.S Patent No. 4577646) as applied to claim 1 and 3-4 above, further in view of Ziehn (U.S Patent No. 4289148). The combination of Ziehn (U.S Patent No. 4577646) and Ashburn does not expressly disclose the step of treating the material presents a pressure time being at least 300 sec.

Regarding claim 2, Ziehn (U.S Patent No. 4289148) discloses in Table I that the increase of filling capacity (62% to 65%) as the action time (corresponding to the claimed "pressure time" recites in the instant claim 2) increases (1 min to 10 min) overlapping the lower limit (300 sec) of the instant claim 2. Although the increase is the difference (3%) between 62% and 65% might be considered non-substantial, it is comparable to the increment of filling capacity presents by the instant applicant of 1% (the difference of 73% and 74% on Table 4). Therefore, it would have been obvious to one of ordinary skill in the art to increase the pressure time to increase the filling capacity.

Regarding claim 7, Ziehn (U.S Patent No. 4577646) discloses the material is compressed before, during or after the pressure vessel is filled (column 6, line 18-26).

Regarding claim 8, Ziehn (U.S Patent No. 4289148) discloses heat exchanger (4, fig. 1) where the treatment gas can be brought to the desired temperature to heat up the tobacco during compression.

Regarding claims 5, 9 and 11, Ziehn (U.S Patent No. 4289148) discloses the pressure vessel can be rapidly pressurized to 800 bar in 60 sec (Table I).

Therefore, Ziehn envisages the change in process variables that involves the vessel being brought up to a desired pressure during the first 60 sec.

Regarding claims 6, 10 and 12-17, Ziehn (U.S Patent No. 4289148) further discloses nitrogen storage tank (15, fig. 1) can be used to compensate pressure different by topping up with nitrogen (column 3, line 3-5). Therefore, Ziehn envisages the performance of renewed pressurization to compensate for pressure loss.

Response to Arguments

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

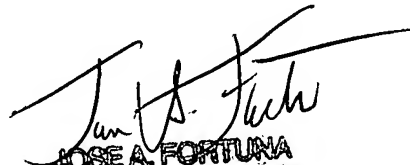
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu H. Nguyen whose telephone number is 571-272-5931. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

P.N 10/29/2007



JOSE A. FORTUNA
PRIMARY EXAMINER
AU: 1731